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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,837	07/20/2005	Adrian Johan Van Leest	NL030093	9005

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
BITAR, NANCY	

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
12/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/542,837	VAN LEEST ET AL.	
	Examiner	Art Unit	
	Nancy Bitar	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/8/07,7/21/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox et al (5,991,426)

As to claim 1, Cox et al teaches the method of embedding a watermark in a motion image signal, the method comprising the steps of: representing said watermark by a sequence of watermark samples each having a first or a second value (video, multimedia or image data , 102, column 4, lines 53); dividing an image of said motion image signal (field separator device , 104) into at least a first and a second image area (divides the input data into two fields 106,108; column 4, lines 54-55) ; determining a global property of the first and the second image area (note that embedding the watermark affects the brightness or the luminance of the area) ; modifying said image to increase the global property of its first area and decrease the global property of its second area for embedding the first value of a watermark sample into said image, and to decrease the global property of its first area and increase the global property of its second area for embedding the second value of said watermark sample into said image (interlace the two signals 114,116 , note that the field-based watermarked signal 120 is the original input data 102 containing a positive watermark in one field 106 and a

negative watermark in the other field 108. Since the watermark in the two fields 106, 108 are approximately the opposite of one another; a masking effect occur such that the visual perception of the watermark is significantly reduced, column 4, lines 55-59).

As to claim 2, Cox et al teaches a method as claimed in claim 1, wherein said global property is the mean luminance value of the respective image area (note that on FIG. 6, that pixel intensity are available. Moreover when the watermark is embedded +W or –W it will affect the brightness of the area).

As to claim 3, Cox et al teaches a method as claimed in claim 1, wherein said modifying step comprises modifying series of consecutive images in accordance with the same watermark sample (figures 3a and 3b).

As to claim 4, Cox et al teaches a method as claimed in claim 1, wherein said first and second image areas are the upper and lower of an image halves, respectively (note that the field separator device 104 divides an image in half either from left to right or upper and lower) .

As to claim 5, Cox et al teaches a method as claimed in claim 1, wherein said first and second image areas are the left and right of an image halves, respectively (see figure 5, 310 a and 310 b).

The limitation of claims 6- 8 has been addressed above except for the following: correlating for said series of images the respective difference with the watermark to be detected .Cox et al teaches that limitation in (column 3, lines 7-17)

As to claims 9, Cox et al teaches a method as claimed in claim 7, further including the step of subtracting from the series of global properties a low-pass filtered version thereof, and applying the correlating step to the subtracted signal (these differences in the two watermarks represent high vertical frequencies when the watermarked fields are combined as a single frame. Moreover, tests reveal that such a watermark is also robust to certain forms of frame-based processing such as brick wall filtering (low pass filtering) and aperture filtering, column 3, lines 42-51).

As to claim 10, Cox et al teaches the method as claimed in claim 9, further including the step of determining the sign of said subtracted signal, and applying the correlating step to said sign (the two fields are highly correlated, when one watermarked field is subtracted from the other watermarked field, the two image portions (or noise portions) cancel each other and the watermarks are added together. The result is a large watermark signal with only a very small contribution from the image data. The watermark signal is subsequently extracted and decoded; column 3, lines 10-16).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haistma et al "A watermarking scheme for digital cinema" teaches a video watermarking scheme designed for the digital cinema format where the watermark is embedded by modulating a global property of the frames with respect to the samples of the watermark.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nancy Bitar whose telephone number is 571-270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nancy Bitar

11/26/2007